

MODEL TEST PAPER

ENTRANCE TEST -2024

M.Sc. Agriculture -I

Name of Candidate _____

Roll No. _____

Instructions for Candidates

1. Every candidate should carry his/her valid Roll No. cum Admit Card to the Entrance Test. No candidate without the valid Roll-No. cum Admit Card will be allowed to enter the examination centre.
2. The question paper will be of Two Hours duration and will comprise of hundred Multiple Choice Questions of One mark each.
3. The candidate has to mark the right option against the question number in the OMR sheet with blue / black pen. The circles marked with pencil will not be marked.
4. There will be no negative marking.
5. The OMR must be handed over to the Room Supervisor even if the candidate has not filled any option.
6. No candidate will be allowed to leave the examination hall before two hours.
7. Do not write/make any identification mark(s)/religious symbols/slogan(s) on the OMR sheet.
8. The candidate must ensure that his/her OMR has been duly stamped.
9. Please ensure that you have signed the attendance sheet.
10. Mobile phones and other electronic gadgets such as Bluetooth etc. are strictly prohibited in the Examination Centre.

Multiple Choice Questions

Time Allowed : 2 hours

Max Marks : 100

1. Method demonstration works on the principle of :
A) Learning is believing B) Learning by teaching C) Seeing and doing D) Learning by doing
2. An extension worker help farmers to attain desirable changes in his:
A) Temperature B) Behavior C) Health D) Wealth
3. The T& V System was sponsored by:
A) WHO B) USAID C) World bank D) IMF
4. Which of the following is not a principle of extension education:
A) Need and interest B) Principle of learning by doing
C) Principle of cultural difference D) None of these
5. The length of time required to pass through the innovation-decision process is called as:
A) Diffusion period B) Adoption C) Overtime D) Innovation-decision period
6. An agricultural innovator is generally viewed as:
A) Opinion leader B) Social deviant C) Skeptical D) Traditional
7. Total number of adopter categories are
A) 2 B) 4 C) 3 D) 5
8. An innovation has relatively high degree of complexity, its adoption will be
A) Quick B) Fast C) Slow D) Can't be said
9. Who is considered as the father of extension in India?
A) KN Singh B) R N Singh C) Shoemaker D) Rogers
10. The S-M-C-R Model of communication is given by
A) Berlo B) Laswell C) Rogers D) Leagans
11. The adopter category , which is considered as the custodian of indigenous knowledge is called as
A) Laggards B) Late majority C) Early adopters D) None of these
12. National rural development guarantee act (NREGA) was enacted in.....
A) September 2006 B.) September 2005 C) January 2006 D) January 2005
13. A registered society of key stakeholders involved in agricultural activities for sustainable agricultural development of the district is known as:
A) NGO B) ATMA C) FIAC D) T and V System.
14. Cost B2 include
A) Cost B1 +rental value of owned land B) Cost B1 + rental value of leased land
C) Cost A1 + rental value of owned land D) Cost A2 +rental value of leased land
15. The objective of product -product relationship is
A) Optimization of production B) Cost minimization
C) Profit maximization D) All of above

16. Distress sale means
 A) Selling more than marketed surplus B) Selling more than marketable surplus
 C) Selling less than marketable surplus D) Selling less than marketed surplus
17. The marketed surplus > marketable surplus
 A) Small and marginal farmers B) Big farmers C) Landless labourers D) All of above
18. Which method of buying and selling is more commonly practiced in regulated markets
 A) Hatha system B) Private negotiation C) Open auction D) Dara sale
19. Kisan credit card (KCC) was started in
 A) 1987 B) 1995 C) 1998-99 D) 1997
20. Total assets / total liabilities gives
 A) Net capital Ratio B) Debt equity ratio C) Leverage Ratio D) Cash Ratio
21. For the selection of the project B: C ratio should be
 A) Greater than 0 B) Greater than 1 C) Less than 1 D) Equal to 1
22. Consumer Surplus is defined as
 A) Difference between price a consumer pays and the actual price
 B) Difference between the actual price and what the supplier pays
 C) Difference between the prices a consumer is willing to pay and what he actually pays
 D) All the above
23. Income effect is negative for which goods
 A) Inferior goods B) Giffen goods C) Normal Goods D) Both A and B
24. Shape of long run average cost curve is
 A) Convex B) Concave C) Straight Line D) Saucer or U shaped
25. Demand curve under for an individual firm under perfect competition is
 A) Perfectly inelastic B) Perfectly elastic C) Elastic D) Inelastic
26. Kinked demand curve theory is for
 A) Oligopoly B) Duopoly C) Monopoly D) Monopolistic
27. Basis of rooting in layering is
 A) Media B) Etiolation C) Both D) None
28. Myrobalan is the rootstock of
 A) Peach B) Plum C) Pear D) All
29. Hesperidium, Blasuta and Amphisarica are the modified form of
 A) Berry B) Pome C) Nuts D) Drupe
30. Denavelling is done in
 A) Mango B) Banana C) Papaya D) Citrus

31. Friendship fruit is
 A) Apple B) Pomegranate C) Pineapple D) Fig
32. Ringing and scoring is practiced in
 A) Guava B) Plum C) Litchi D) Apple
33. Most abundant and basic auxin is
 A) NAA B) IAA⁻ C) 2-4 D D) IBA
34. Germination of the seed while it still remains attached with the parent source
 A) Ovipary B) Apomixis C) Vivipary D) Asepsis
35. Tongue grafting is a modified form of
 A) Saddle grafting B) Whip grafting C) Inarching D) None
36. What is the chromosome number of cucumber?
 A) 14 B) 18 C) 22 D) 26
37. Which crop is a short-day plant?
 A) Potato B) Okra C) Sweet potato D) Beetroot
38. Which crop has poor storability of seeds?
 A) Radish B) Okra C) Tomato D) Onion
39. Due to which mechanism tomato is a self pollinated crop.
 A) Cleistogamy B) Chasmogamy C) Dichogamy D) Heterostyly
40. Which crop has maximum inbreeding depression?
 A) Cabbage B) Lettuce C) Onion D) Brinjal
41. ICMR recommendation of vegetables/day for balance diet.
 A) 220g B) 250g C) 300g D) 320g
42. Pungency of chilli is measured by.....
 A) Vernier caliper B) Refractometer C) Dendrometer D) Scoville heat units
43. In which crop India is the leading producing country in world.
 A) Capsicum B) Okra C) Lettuce D) Tomato
44. Cole crops are originated from which common ancestor.
 A) Brassica oleracea var. gemmifera B) Brassica oleracea var. sylvestris
 C) Brassica oleracea var. acephala D) Brassica oleracea var. gongylodes
45. All of this obeys Mendel's law except
 A) Linkage B) Independent assortment C) dominance D) purity of gametes
46. Which of the following is called the sex-linked disease?
 A) Leukemia B) Alzheimer's C) Malignancy D) Colour blindness
47. This is a type of inversion in which the centromere is not involved
 A) Paracentric inversion B) Pericentric inversion C) Plectonemal D) None of above

48. A fully expressed allele is referred to as _____.
- A) Dominant B) Recessive C) Homologous D) Heterozygous
49. DNA replication is
- A) Conservative B) Conservative and discontinuous
- C) semi-conservative and discontinuous D) Semi-conservative and semi-discontinuous
50. In _____ self incompatibility, genotype of pollen determines the incompatibility.
- A) Outbreeding B) Interspecific C) Sporophytic D) Gametophytic
51. Quarantine regulations are enforced by?.
- A) A country. B) A state. C) A state or country through legislation. D) None of any option.
52. In 1963 concept of vertical and horizontal resistance was given by :-
- A) Eriksson B) Orton C) Stakman D) Vanderplank
53. "Special structures" rhizoids" are produced in the fungus:-
- A) Aspergillus B) Penicillium C) Mucor D) Rhizopus
54. "Whip smut" of sugarcane is caused by :-
- A) Ustilagoscitaminea B) Ustilagonuda C) Ustilgomaydis D) Ustilgohordei
55. Which one is poisonous mushroom ?
- A) Pleurotus B) Agaricus C) Volvariella D) Amnita
56. The smallest pathogenic agent is:-
- A) Virus B) Viroid C) Virusoid D) Prion
57. Dispersal of plant pathogens through wind is known :-
- A) Hydrochory B) Zoochory C) Anemochory D) Anthorochory
58. First plant pathogenic nematode was discovered by :-
- A) Needham B) Cobb C) Kuhn D) Devaine
59. "Khairadisease" of rice is caused by deficiency of :-
- A) Nitrogen B) Zinc C) Potash D) Phosphorus
60. "Kresk phase" symptoms found in :-
- A) Late blight of potato B) Black arm of cotton
- C) Bacterial leaf blight of rice D) Moko disease of banana
61. The two important compounds of cell wall in most of the fungi are :-
- A) Glucan and cellulose B) Peptidoglycan and cellulose
- C) Chitin and glucan D) Peptidoglycan and Chitin
62. Which Fungicide is specific for downy mildew fungi:-
- A) Karathane B) Plantvax C) Metalaxyl D) Vitavax
63. taphrinamaculans causes the disease:-
- A) Leaf spot of turmeric B) Tikka of groundnut
- C) Powdery mildew of pea D) Wilt of pigeon pea

64. Crop logging is defined by:
 A) H.F. Clement B) Nicholas C) Arnon and stout D) De Datta and Gomez
65. Which nutrient is moderately mobile in plants?
 A) Ca B) N C) Zn D) Mo
66. The conversion factor for calculating P from P_2O_5 :
 A) $P_2O_5 \times 2.29$ B) $P \times 0.44$ C) $P \times 2.29$ D) $P_2O_5 \times 0.44$
67. The population of fungi is found more in:
 A) Alkali soil B) Saline soil C) Acid soil D) Both (b) and (c)
68. $Ca(OH)_2$ is a:
 A) Slaked lime B) Quick lime C) Burnt lime D) None of these
69. How much nitrogen is fixed by rhizobium?
 A) $0-50 \text{ kg ha}^{-1} \text{ year}^{-1}$ B) $50-200 \text{ kg ha}^{-1} \text{ year}^{-1}$
 C) $200-350 \text{ kg ha}^{-1} \text{ year}^{-1}$ D) $350-480 \text{ kg ha}^{-1} \text{ year}^{-1}$
70. Prism like soil structure is mostly found in which horizon in arid and semi arid regions?
 A) A- horizon B) B- horizon C) C- horizon D) O- horizon
71. Excess P encourages the deficiency of:
 A) Zn B) Fe C) Cu D) All of these
72. Element responsible for binding primary particle is:
 A) Ca B) Na C) S D) K
73. Major organic acid is produced during decomposition of organic matter is:
 A) Fulvic acid B) Humic acid C) Humin D) Humus
74. What is the depth of small gullies?
 A) 3-9m B) <3m C) 9-12m D) 12-18m
75. Increase in zeta potential of soil particles leads to:
 A) Flocculation B) Dispersion C) Both (A) and (B) D) Aggregation
76. Which of the following orders of insects have entognathous mouth parts?
 A) Thysanura, Diplura B) Diplura, Odonata C) Odonata, Collembola D) Protura, Diplura
77. Following layer of cuticle is resistant to moulting fluid
 A) Exocuticle and procuticle B) Exocuticle and epicuticle C) Endocuticle D) Procuticle
78. One mesometathoracic and eight abdominal spiracles are functional; the respiratory system is called
 A) Holoneustic B) Perineustic C) Hemineustic D) Metaneustic
79. The type of parthenogenesis where only males are produced is
 A) Arrhenotoky B) Thelytoky C) Amphitoky D) None of these
80. What is the generally accepted mode of action for organophosphate insecticides?
 A) Chitin inhibitor B) Cholinesterase inhibitor C) Stomach poison D) Respiratory toxin

81. Silk glands in silkworms are modified
 A) Maxillary glands B) Mandibular glands C) Labial glands D) Thoracic glands
82. Which structure/structures are innervated by the protocerebrum
 A) Compound eyes and ocelli B) Antennae C) Mouthparts D) Bursa copulatrix
83. A naiad is best described as
 A) Predatory larva B) Wingless adult C) Aquatic nymph D) Scavenger
84. Indian migratory locust is:
 A) Schistocerca gregaria B) Patanga succincta C) Locusta migratoria D) Heliothis armigera
85. To which body segment are the elytra attached?
 A) Mesothorax B) Prothorax C) First abdominal D) Metathorax
86. The first nymphal stage of the Bemisia tabaci is known as
 A) Crawler B) Chrysalis C) Naiad D) Grub
87. Which part of the cotton is fed by the young larvae of pink bollworm
 A) Seeds B) Leaves C) Stem D) Roots
88. Which state is leading Turmeric growing Indian state:
 A) Rajasthan B) Gujarat C) Andhra Pradesh D) Madhya Pradesh
89. Important small cardamom growing Indian state is:
 A) Assam B) Kerala C) Sikkim D) Goa
90. Important large cardamom growing Indian state is :
 A) Assam B) Kerala C) Sikkim D) Goa
91. When Indian seed act was framed to ensure quality seed production and supply
 A) 1947 B) 1957 C) 1966 D) 1986
92. Central Rice Research Institute is situated at
 A) Hyderabad B) Cuttack C) Jhansi D) Raipur
93. Indian Jute Technology Research Institute was Situated in
 A) Assam B) Sikkim C) West Bengal D) Bihar
94. Indian Grassland and Fodder Research Institute is situated at
 A) Lucknow B) New Delhi C) Jabalpur D) Jhansi.
95. Rice milling percent was ranges between
 A) 58 to 60 B) 61 to 64 C) 65 to 70 D) 71 to 75.
96. Extra long grain of Basmati Rice ranges between
 A) >7mm B) 6.6 to 7mm C) 6.2 to 6.6mm D) <6.2mm
97. Which nutrient is present in the centre of chlorophyll molecule
 A) Fe B) Mn C) N D) Mg.

98. Flour recovery in Wheat after milling was between
A) 60to64% B) 65to69% C) 70to74% D) >75%
99. Diuron, Isoproturon, Metxuron Herbicides belongs to which of the following group on the basis of their chemistry
A) Organohosphorus B) Substituted ureas C) Sulphonyl ureas D) Triazines.
100. Brown mustard generally known as
A) Raya and Rai B) Gobi Sarson C) Toria D) Canola.

ROUGH WORK